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ART UNIT	**PAPER NUMBER**
1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/598,357	LESARTRE ET AL.	
	Examiner	Art Unit	
	DIMPLE N. BODAWALA	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-42* is/are pending in the application.

4a) Of the above claim(s) *22-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *32-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/20/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 22-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected a method, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/23/2009.

2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

3. Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country.

4. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Europe on 2/27/2004. It is noted, however, that applicant has not filed a certified copy of the **EP 04300102.3** application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims **32-42** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 32 is vague and indefinite because claim cites limitation of "**the flow** of the mixture" in line 13. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 32 is vague and indefinite because claim cites limitation of "**the mold**" in line 16. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 32 is vague and indefinite because it is unclear which adequate structural element is involved for filling means.

10. Claim 33 is vague and indefinite because claim cites limitation of "**the flow** direction" in line 2. There is insufficient antecedent basis for this limitation in the claim because claim 33 is depended on claim 32, wherein claim 32 does not cite such limitation, therefore such limitation of claim 33 makes the scope of the subject matter indeterminate.

11. Claims 34, 35 and 37 are vague and indefinite because they are unclear about "**wherein each vent**", wherein claims are depended on claim 32 and claim 32 cites limitation of :…at least a vent…", not a plurality of vents, therefore limitation of claims such as "wherein each vent…" makes the scope of the subject matter indeterminate.

12. Claim 38 is vague and indefinite because it is unclear which element adapted for the application of a post-injection pressure in the mold cavity after filling.

13. Claims 41 and 42 are vague and indefinite because they cite limitation of "**the flat trapezoidal faces of the enlarging spout**" lack sufficient antecedent basis in the claims because claims depended on claim 40, wherein claim 40 fails to cite such limitation, and therefore such limitation of claims 41-42 makes the scope of the subject matter indeterminate.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. **Claims 32-34, 37-38 and 40 are rejected under 35 U.S.C. 102(a) as being anticipated by Kadota et al. (WO 03/084728 having translation similar to US 2005/0200033).**

16. **Claims 32-34, 37-38 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Kadota et al. (US 2005/0200033).**

17. As to claim 32, Kadota et al. discloses an invention related to produce optical member such as plastic lens, wherein invention is capable to use **RIM machine** for mixing component A and component , immediately after mixing the mixture is cast into a casting mold (See abstract; Paragraph # 111, 143, 149), thus, invention is capable to have **mixing chamber** to prepare mixture to be molded. It further discloses mold body having upper mold and lower mold halves (2A,2B) and mold cavity (4) defined therebetween, wherein mold cavity is sealed by gasket (5) in order to define **sealed cavity** with a substantially circular shape comprising a center and a transversal thickness corresponding to that of the lens to be manufacture, wherein the cavity being limited by two plates (2a,2b) between which is inserted an elongated seal (5) (See figure 3; paragraph #145) and comprising **an entry side (7)** provided with a cast opening (71,73) and **an evacuation side (92)** opposite to the entry side (See figure 13). It further teaches that the invention comprises **an injection duct** (100) connecting the mixing chamber (not shown but discussed in the disclosure) to the mold cavity (See figure 9a), wherein the injection duct having an outlet opening (101) (See figs.9a-9b); and **flat space (72) as spout** connecting the outlet opening of the injection duct to the cast opening of the mold cavity (See figures 1, 4, 13 and 16), wherein the spout defining the flat space having an axis substantially passing by the center of the mold cavity and being limited by two flat faces (See figures 1, 13) and two diverging sides inclined on either side of the axis and tangentially connecting to the circular shape of the cavity (See figures 9a-9b). It further teaches that the casting jig further comprises a discharge groove (81) which could be use as **vent (81)** on the evacuation side (92) of the mold (See figure 13). It further teaches

that the invention comprises casting jig (100) as **filling means** is aligned with casting inlet and capable to push the mixture from the discharge point (16) of the mixing chamber to the mold cavity via injection duct opening and spout for filling the mold cavity under pressure during use (See paragraph # 223).

18. As to claim 33, Figure 9 of Kadota shows that the injection duct is prolongated by a portion extending in the flow direction from the outlet opening up to a closed end, the portion forming a reserve for trapping a first part of the mixture flowing in the injection duct (See figures 1-8 and 10-17 also with the space near casting opening).

19. As to claim 34, Kadota further teaches that the vent (81) provided on the evacuation side of the mold cavity comprises an aperture which is small enough to avoid reactants contained in the mixture to flow outside (See figure 13).

20. As to claim 36, Kadota further teaches that the invention comprises a space opening (83) on the evacuation side of the mold cavity and adapted to trap air contained in the mixture, wherein the mold cavity and the space being surrounded by a common continuous seal (5) (See figure 13).

21. As to claim 37, Kadota further teaches that the vent comprises an aperture (81) provided in the seal (5) on the evacuation side (92) of the mold cavity (See figure 13).

22. As to claim 40, Figure 9 of Kadota further teaches that the mold cavity extends along a titled median plane making an angle different from zero with a horizontal plane and comprises a low entry side (73) and a high evacuation side (92).

23. However, claims **32-34, 37-38** of the instant application cite structural limitations with the intended uses as further limitations of the subject matter, such as **mixing chamber** for preparing mixture; **filling means** to force the flow of the mixture from the chamber to the cavity; **portion of the injection duct** for forming a reserve for trapping a first part of the mixture flowing in the duct; **aperture** involved to avoid reactant contained in the mixture to flow outside; **venting aperture** for the application of a post injection pressure in the mold cavity after filling and air evacuation. As we know that if

prior arts disclose all claimed structural limitations as discussed above, so the structural limitations of the arts are capable to operate in desired functions as required. Intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder, 168 USPQ 530.* The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey, 152 USPQ 235, 238.* Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during the intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault, 164 USPQ 666.* A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham, 2 USPQ2d 1647.*

24. **Claims 32-34, 37-38 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill et al. (US 5,656,210).**

25. As to claim 32, Hill et al. discloses reaction injection molding invention for manufacturing contact lens having a substantially circular shape and regular transversal thickness (See abstract), wherein invention comprises **a mix head** (7) as mixing chamber for receiving materials from the reservoirs (1) and preparing mixture to be molded (See figure 1); **mold cavity** (8) is defined between the mold walls, wherein mold walls able to make seal for the mold cavity, and, thus such configuration of the mold cavity is defined as **sealed mold cavity** with a substantially circular shape comprising a center and transversal thickness corresponding to that of the lens to be obtained, wherein the cavity is being limited by two plates (11) between which is inserted an elongated seal (not labeled but shown in figure 1) and comprising an entry side (13) provided with a casting opening and an upper side of the cavity is counted as an evacuation side opposite to the entry side (See figure 2); an **injection duct** (not labeled but shown in figure 1) connecting the mixing head to the mold cavity, wherein the injection duct having an outlet opening (See figure 1); an entry side of the cavity having substantially **flat space**

with an axis substantially passing by the center of the mold cavity and being limited by two flat faces and two diverging sides inclined on the side of axis and tangentially connecting to the inner surface of the cavity (See figure 2), therefore, **an entry side of the cavity is defined as a spout** as claimed; and **at least a vent (12)** on the evacuation side of the mold cavity (see figure 2). Figure 1 show that invention comprises connecting means (10) adapted to discharge the flow of the mixture from the mixing chamber (7) to the mold cavity (8) via injection ducts and spout for filling the cavity under pressure (See col.4 lines 1-9).

26. As to claim 33, figure 1 of Hill et al. shows that the injection duct is prolongated by a portion extending in the flow direction from the outlet opening of the injection duct up to a closed end, wherein the portion forming a reserve for trapping a first part of the mixture flowing in the injection duct.

27. As to claims 34 and 37-38, Hill et al. further teaches that the vent (12) provided on the evacuation side of the cavity comprises an aperture which small enough (See fig. 2).

28. As to claim 40, figure 2 of Hill et al. further shows that the mold cavity (8) extends along a titled median plane making an angle different from zero with a horizontal plane and comprises a low entry side (13) and a high evacuation side (12).

29. However, claims **32-34, 37-38** of the instant application cite structural limitations with the intended uses as further limitations of the subject matter, such as **mixing chamber** for preparing mixture; **filling means** to force the flow of the mixture from the chamber to the cavity; **portion of the injection duct** for forming a reserve for trapping a first part of the mixture flowing in the duct; **aperture** involved to avoid reactant contained in the mixture to flow outside; **venting aperture** for the application of a post injection pressure in the mold cavity after filling and air evacuation. As we know that if prior arts disclose all claimed structural limitations as discussed above, so the structural limitations of the arts are capable to operate in desired functions as required. Intended use has been continuously held not to be germane to determining the patentability of the

apparatus, *In re Finsterwalder, 168 USPQ 530.* The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey, 152 USPQ 235, 238.* Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during the intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault, 164 USPQ 666.* A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham, 2 USPQ2d 1647.*

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

31. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

32. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

33. **Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (US 5,656,210) in view of Andino et al. (US 2002/0163095).**

34. **Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (WO 03/084728 having translation similar to US 2005/0200033) in view of Andino et al. (US 2002/0163095).**

35. Hill et al. and/or Kadota et al. disclose all claimed limitations as discussed above. They further teach that the evacuation side of the mold cavity comprises vent aperture, but does not cite that the aperture comprises a removable valve as cited in claim.

36. Andino et al. discloses a mold for casting ophthalmic lenses, wherein mold comprises mold halves (112,114) and a mold cavity (115) filled through the bottom opening (111) and is vented from the top opening (113) (See figures 6A-6B). It further teaches that the venting takes place through the pressure relief valve (118) in communication with the top opening of the cavity (See paragraph # 71).

37. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Hill et al. and/or Kadota et al. by placing valve into the vent aperture as taught by Andino et al., wherein such configuration enable to vent through the opening under the application of sufficient pressure, which would be useful to remove flash from the finished lens (See paragraph # 71), in order to manufacture lens with excellent appearance and quality.

38. **Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (US 5,656,210) in view of Su et al. (US 2003/0173692).**

39. **Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (WO 03/084728 having translation similar to US 2005/0200033) in view of Su et al. (US 2003/0173692).**

40. Hill et al. and/or Kadota et al. disclose all claimed limitations as discussed above. They further teach that the evacuation side of the mold cavity comprises vent aperture, but does not cite that the aperture comprises a plug as cited in claim.

41. Su et al. discloses a mold assembly for making an optical lens, wherein assembly is capable to use a plug (44) for filling any unfilled spaces created between the interior surfaces of the mold (See paragraphs 47-48), thus, plug of Su et al. enable to use for blocking vent aperture. It further teaches that the plug can be made from non-adhesive thermo plastic material such as an elastomeric material, thermoplastic rubber, etc., or metal, alloy, ceramic material, plastic material, glass or the like (See paragraph # 47), wherein use of elastomeric material for plug indicates that the plug is adapted to expand and the close the aperture due to an increase of the temperature when the cavity is filled. It further teaches that the plug can take various geometric shapes such as round, oval, triangular, rectangular, square, etc. (See paragraph # 47).

42. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Hill et al. and/or Kadota et al. by placing plug of Su et al. within the vent aperture of the primary art, because such plug is capable to make from elastomeric material, which having property of expanding during the application of temperature, in order to seal the vent aperture, and maintain temperature within the cavity during the casting operation, in order to mold the lens with excellent appearance and quality. It is not necessary that the prior art suggests expressly or in so many words the changes or possible improvements the inventor made but that the knowledge is clearly present. *In re Sernaker, 217 USPQ 1 (Fed. Cir. 1983).*

43. **Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (US 5,656,210) in view of Kudert et al. (US 5,523,045) or Osawa et al. (US 2003/0122281).**

44. **Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al. (WO 03/084728 having translation similar to US 2005/0200033) in view of Kudert et al. (US 5,523,045) or Osawa et al. (US 2003/0122281).**

45. Hill et al. and/or Kadota et al. disclose all claimed limitations as discussed above. They further disclose spout having flat faces and space but fail to teach or suggest **flat trapezoidal faces of the spout** as cited in claim.

46. Kudert et al. ('045) discloses an injection molding for manufacturing a plastic article which comprises a feed connection (1101) comprises a central feed channel (546) having a fan shaped gate as a spout having **delta-shaped is counted as flat trapezoidal faces of the spout**, wherein the central feed channel is expanding in the mold cavity main plane toward the mold cavity (see figure 133); and further comprises two side feed channels arranged symmetrically to the mold symmetry plane on either side of the central channel (See figure 133), wherein each side feed channel having a curved portion extend along the feed sill of the mold cavity (See figures 131-137; col.2 lines 60-67).

47. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Hill et al. and/or Kadota et al. ('058) by providing **flat trapezoidal faces** of the spout of Kudert et al. because such alignment having two side faces which are capable to expand quickly liquid polymerizable composition along the periphery of the mold cavity within the main plane for molding the optical elements with desired dimension and features.

48. Osawa et al. discloses an injection molding apparatus comprises mold body (1) defining mold cavity (2), gate (3) as spout and an injection duct opening (not labeled but shown in figure 5), wherein spout having **flat trapezoidal faces** (See figures 5-12), wherein such configuration of spout enable to direct the flow of the material in at least two streams that flow through the cavity and then meet at a confluent point so that the molding material portions are joined together along a joint plane, wherein such

configuration of the molded article exhibited with stabilized strength and outer appearance (See paragraph # 14-16).

49. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Hill et al. and/or Kadota et al. ('058) by providing **flat trapezoidal faces** of the spout of Osawa et al. wherein such configuration of spout enable to direct the flow of the material in at least two streams that flow through the cavity and then meet at a confluent point so that the molding material portions are joined together along a joint plane, and thus able to exhibit the molded article with improved strength and outer appearance (See paragraph # 14-16).

Conclusion

50. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTOL-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dimple N Bodawala
Examiner
Art Unit 1791

/D. N. B./
Examiner, Art Unit 1791

/Philip C Tucker/
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